

COUNCIL COMMUNICATION

AGENDA TITLE:

Authorize City Manager to Execute a Professional Services Agreement with

West Yost & Associates for Engineering Services to Assess Component Failure Modes

and Effects Analysis for the White Slough Water Pollution Control Facility; and

Appropriate \$25,600 for the Project

MEETING DATE:

October 4, 2000

PREPARED BY:

Public Works Director

RECOMMENDED ACTION: That the City Council authorize the City Manager to execute a professional services agreement with West Yost & Associates for engineering services to conduct an assessment of component reliability and failure effects at the White Slough Water Pollution Control Facility (WSWPCF); and appropriate \$25,600 for the project in accordance with the recommendation below.

BACKGROUND INFORMATION:

The objective of this study will be to identify those control, monitoring, and alarm components of the WSWPCF that can most likely and immediately affect the ability of the WSWPCF to meet its discharge requirements should that component fail. The need for this study has

resulted from the recent assessment of a \$20,000 fine by the Central Valley Regional Water Quality Control Board for a brief discharge of effluent containing chlorine concentrations in excess of permit limits. West Yost & Associates has been selected to perform this work because of their extensive involvement and experience developing the current Discharge Permit and Master Plan.

FUNDING:

Requested Appropriation:

Wastewater Fund

\$25,600

Funding Available:

Vicky McAthie, Finance Director

Richard C. Prima, Jr. **Public Works Director**

Prepared by Del Kerlin, Assistant Wastewater Treatment Superintendent

RCP/DK/dk

Attachment

Fran E. Forkas, Water/Wastewater Superintendent Del Kerlin, Assistant Wastewater Treatment Superintendent T Brett Moroz, Chief Wastewater Plant Operator

Bruce West, West Yost & Associates

APPROVED:

ATTACHMENT A

City of Lodi White Slough Water Pollution Control Facility Component Failure Modes and Effects Analysis PRELIMINARY LIST OF PLANT COMPONENTS

Headworks

Influent flow metering

Influent comminution

Grit tanks

Grit pumps

Grit washing system

Influent pumping

Primary Sedimentation

Sludge collection mechanisms

Sludge pumps

Scum pumps

Sludge and scum flow metering

Aeration Basins

Dissolved oxygen probes

Air flow meters

Blowers

Blower controls

Secondary Clarifiers

Secondary clarifier mechanisms

Secondary clarifier scum pumps

Return Sludge Pumping

Return sludge pumps

Return sludge flow metering

Waste sludge pumps

Waste sludge flow metering

Disinfection System

Effluent flow metering

Chlorinators

Chlorine injectors

Chlorination flash mixer

Chlorination residual analyzers

Sulfonators

Sulfur dioxide injectors

Dechlorination residual analyzers

SCADA and Alarm System

PLC Hardware

PLC Software Controls (normal operating

conditions)

PLC Software Controls (abnormal or alarm

conditions)

Backup Controls

Plant on-site alarm system

Power Distribution System

Normal Utility Power

Back-up Power (installed, portable &

alternate sources

Plant Power Distribution System